

CLAIMS

I claim:

1. A nosepiece to be attached to a fastening tool for fastening workpieces by a rivet and a mandrel, said nosepiece comprising a protrusion for forming a recess in a flange of said rivet.

2. A fastened structure comprising a rivet, a mandrel, and workpieces fastened together with said rivet and said mandrel, wherein

said rivet includes a flange having a recess formed by a nosepiece attached to a fastening tool and provided with a protrusion, and a stem deformed to increase in its diameter by a caulking portion of said mandrel, the recess is formed in the flange and the stem is deformed when a shank of said mandrel is drawn by said fastening tool, and

a coating of one of said workpieces on the side of said flange was partially peeled due to said formed recess, whereby said flange-side workpiece and said rivet are electrically conducted to one another.

3. A method for fastening workpieces together with a rivet, comprising the steps of:

disposing a mandrel having a caulking portion and a shank with a hollow rivet having a flange and a stem, and positioning said combined mandrel and rivet in a hole formed in said workpieces;

bringing a nosepiece fixed to a fastening tool and provided with a protrusion into contact with said flange of said rivet;

drawing said shank of said mandrel by said fastening tool to deform said stem of said rivet to increase in its diameter;

breaking said mandrel at a breaking portion thereof during said drawing of said mandrel shank; and

making said protrusion of said nosepiece fixed to said fastening tool bite into said flange of said rivet to form a recess in said flange of said rivet and thereby partially peel a coating of one of said workpieces on the side of said flange, whereby electrical conductivity between said flange-side workpiece and said rivet is established.

4. A fastening tool for fastening workpieces together with a rivet and a mandrel, said fastening tool comprising:

an elongated hollow housing;

a jaw provided inside said housing movably rearward and adapted to engage with and hold a shank of said mandrel; and

a nosepiece adapted to be attached the front end of said housing and to engage with a flange of said rivet, said nosepiece having a protrusion, wherein

when said jaw is moved rearward to draw out said shank of said mandrel held by said jaw, said mandrel is operable to deform said rivet to increase in its diameter by a caulking portion of said mandrel and to be broken at a breaking portion of said mandrel, and

said protrusion of said nosepiece is adapted to bite into said flange of said rivet to form a recess in said flange and thereby partially peel a coating of said workpieces, resulting in electrical conductivity between said workpieces and said rivet being established.